



Center boosts Alabama's economy \$722 million

By Kelly McFalls

Marshall Center contributed more than \$722 million to Alabama's economy in fiscal year 1998.

Of that amount, \$223 million was paid in salaries by the Marshall Center for civil service personnel, related costs and travel during the period from Oct. 1, 1997, to Sept. 30, 1998. The total also includes \$499 million spent by Marshall on locally procured services, prime and subcontractor support, local construction and reimbursable activities performed for other federal agencies, private industry and foreign governments.

"Throughout 1999 and well into the future, the Marshall Center will remain a vital contributor to America's future in space and to the economy of Huntsville and the State of Alabama," said Marshall Center Director Art Stephenson.

Approximately \$66 million in retirement annuities were paid to 2,511 Marshall retirees residing in Alabama. That includes \$39 million paid to 1,487 retirees living in Huntsville.

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Photo by Donna Mahieux

It's the Easter Bunny!

Mitchell Pettus, son of Judy Pettus of the Media Relations Office, visits the Easter Bunny at the Annual Easter Egg Hunt held Sunday at the Marshall Picnic Area. The event was planned by Gena Marsh of the Chief Council's Office and Donna Mahieux of the Information Systems Services Office.

New Flight Projects Directorate focuses on Space Station support

Editor's Note: *This is the third in a series of articles about the Marshall reorganization announced Jan. 29 by Center Director Art Stephenson.*

By Mike Wright

Marshall's new Flight Projects Directorate will be the focal point for most Marshall employees and resources supporting the International Space Station, says Axel Roth, the leader of a team of 16 people from across the Center. The team structured the new directorate as part of Marshall's overall reorganization.

"We will be more focused," said Roth. "The team worked very hard within its own ranks and also got great support from many other people at Marshall. We must

have had four or five draft organizational layouts that were presented to the team and fully discussed before coming to a consensus on the final organization."

About 90 to 95 percent of the work the directorate will do will involve the International Space Station, he said. "We do have a few minor Spacelab pallet flights that are outside of the Space Station activity. But we also have a number of Spacelab pallets on which elements of Space Station hardware will be taken to the station by Shuttle and then deployed on the Space Station."

The new directorate will include approximately 270 people. "We started with the premise that Center Director Art Stephenson started with. The old 'JA' organization, which was the Flight Projects Office, will be one of the core elements of this new directorate. The Mission Operations Lab will be the second element. The directorate will also be in

charge of space solar power," said Roth.

Initial discussions centered on which groups in the Flight Projects Office and Missions Operations Lab would stay in the new directorate and which groups would move to other directorates. Discussions also focused on what groups would be brought in from outside the two major existing organizations.

"For example, the Instrument Development Office in the Flight Projects Office was involved in Solar-B and Gravity Probe B. This office was strictly science oriented. Obviously, we felt that work should go to the Science Directorate," Roth said. In similar fashion, human factors work, originally assigned to the Mission Operations Lab, was transferred to the new Engineering Directorate.

"We also identified groups in other organizations that were doing work that primarily supported the Flight Projects

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"Safety never hurts"

— Safety slogan submitted by
Scott Worley, EB13

Marshall employees, retirees gain direct access to Space & Rocket Center

Marshall employees and retirees will soon have direct access to the U. S. Space & Rocket Center during normal operating hours. Marshall Director Art Stephenson and U. S. Space & Rocket Center Director Mike Wing agreed to the new admission policy on March 23.

The new policy allows Marshall employees, their spouses and children under 21 who still live at home and Marshall retirees and their spouses direct access to the Space & Rocket Center. Guests and other family members of employees and retirees are welcome, however they will pay regular admission prices or purchase discounted tickets as available from the NASA Exchange.

Previously Marshall employees desiring access to the Space & Rocket Center had to call Marshall's liaison to the Space & Rocket Center, Cassandra Pitts of the Government and Community Relations Office, and be placed on a guest register.

Under the new policy, eligible employees and retirees can enter the Space & Rocket Center's Human Resources Office through the Administrative Office entrance. A new badge will be issued after presenting Marshall civil servant identification badges beginning April 1. This new policy will be more efficient and allow Marshall employees and retirees direct access to the museum, bus tour to Marshall and IMAX movie presentations during regular operating hours.



Photo by Emmett Given

Senators visit Marshall

Center Director Art Stephenson, left, presents X-34 models to U.S. Senators Mary Landrieu of Louisiana, center, and Robert Smith of New Hampshire. The senators visited Marshall March 19.

NASA administrator speaks to nation's business leaders at U.S. Chamber of Commerce

NASA Administrator Daniel S. Goldin addressed business leaders on March 16 at the National Forum on the Future Development of Space held in Washington, D.C., at the U.S. Chamber of Commerce.

Approximately 200 attendees heard Goldin speak about getting commercial industry involved in the development of space and the merits of forming a new Space Council within the Chamber of Commerce.

The speaking engagement and Forum were part of Marshall's study of the development of space activities and NASA's mission to enable development of space, according to David Smitherman from Marshall's Program Development Directorate.



Daniel S. Goldin



File photo

'For the Record'

Center Director Art Stephenson, at right, appeared on the Alabama Public Television program "For The Record" Monday evening. Tim Lennox, host of "For the Record," is seated at left. Stephenson discussed current and future plans for the Center and answered call-in questions from viewers.

Obituary

Sweat, Sidney James, 74, Fletcher, N.C., died March 10. He retired from Marshall in 1978 where he worked in the Facilities Office. He is survived by his wife Belva Jane Sweat.

Exhibit showcases promising Marshall technologies

by the Technology Transfer Office

Marshall's Technology Transfer, Microgravity and Space Transportation offices showcased the Center's technology efforts at the National Manufacturing Week Conference and trade show in Chicago last week.

The event, with an estimated 65,000 manufacturing professionals in attendance, is the nation's third largest trade show.

As part of an aggressive campaign to commercialize NASA technologies, the Technology Transfer Office highlighted

developments in thermal gasket seals, stepper motors, video stabilization and other promising Marshall technologies.

Technology Transfer also provided a display on the Productivity Enhancement Complex, and unveiled the "40 Years of Solutions" CD-ROM, which highlights the complex. The CD-ROM also looks at doing business with NASA, some major NASA historical milestones and several technology spinoffs.

Representatives from Marshall and several other centers were on hand to discuss a range of NASA developments

and their potential applications in the commercial sector, and to identify potential partners for licensing those technologies.

The Microgravity and Space Product Development representatives provided an overview of both current and potential research projects, encouraging both the use of recent developments and the pursuit of new joint projects among industry's cutting edge manufacturers.

Technical presentations were given on a variety of topics, including NASA's Technology Transfer effort, Marshall's thermal gasket seal, video stabilization and stepper motor work. Embedded Web technology, developed at Glenn Research Center in Cleveland, Ohio, and flat screen video technology, developed at Goddard Space Flight Center in Greenbelt, Md., also received considerable attention from designers and executives attending the event. Marshall's Dr. Fred Bickley, chief engineer for the International Space Station Propulsion Module at Marshall, gave a special presentation on parallel manufacturing techniques.

Other contributors included the National Technology Transfer Center, W.Va, several Regional Technology Transfer Centers, Research Triangle Institute, N.C., Glenn Research Center, Goddard, Stennis Space Center, Miss., and Jet Propulsion Laboratory in Pasadena, Calif.



File photo

The Technology Transfer exhibit engages visitors leaving the Advanced Space Transportation display at the National Manufacturing Week Conference held last week in Chicago.

Redstone officials dedicate complex to crash victims

A Marshall Center employee who died in an airplane crash in 1977 was among those remembered March 16 when officials at Redstone Arsenal dedicated a newly renovated housing complex.

James A. Power, the experiments director of the High Energy Astronomical Observatory, Space Science Projects Office, was one of nine Team Redstone employees honored at the dedication of the Visiting Officers Quarters Complex.

Former Marshall employee Herman G. Hamby also died in the April 4, 1977, crash that killed 69 people.

Other Team Redstone employees honored and remembered at

the ceremony included William V. Gudaitis, chief of the Project Management Office of the Patriot Project Office; Tommy J. Coe, an electronics engineer in the Missile Intelligence Agency at Redstone; Gordon B. Coley, Redstone's resident engineer for the Mobile District Corps of Engineers; Phillip R. (Randy) Sherrill, an electronics engineer with the Missile Intelligence Agency and a captain in the U.S. Air Force Reserve; Thomas M. Mazingo, Procurement and Production Directorate; Major Edward F. Rosler, a cost analyst in the Patriot Project Office; Pfc. William F. Goubeaud, a member of the U.S. Army Reserves; and Pvt. Robert M. Sanders, who had recently graduated from the U.S. Army Missile & Munitions Center & School.

See state-of-the-art laser shows at U.S. Space & Rocket Center

The U.S. Space & Rocket Center has a new state-of-the-art laser show now being presented through May 27. The cost varies depending on the day and time you go and the laser show presentation.

Space & Rocket Center members can go free. For more information, call Melissa McNeal at the Space & Rocket Center, 837-3400.

The laser show schedule includes a daily matinee at a cost of \$4 for adults and children. Now showing - April 17: 9:30 a.m. — Lasers 101 and The Great Space Chase; and 4:10 p.m. — Space Odyssey. Showing April 18 - May 27: 9:30 a.m. — Lasers 101 and The Great Space Chase; and 4:10 p.m. — Space Odyssey.

Evening shows every Friday and Saturday are \$7 for adults and \$5 for children ages 3-12. Now showing - May 22: 8 p.m. — The Beatles Laser Anthology; 10:30 p.m. — Laser Beastie Boys; and 11:30 p.m. — Laser Floyd: Dark Side of the Moon.

Also showing - April 17, \$6 for adults and \$5 for children ages 3-12: Olympic Glory, 5 p.m., 6 p.m., and 7 p.m.



Photo by Doug Stoffer

All Aboard!

Starr Culpepper from Delta Academy in Birmingham, Ala., and friends climb aboard a display during a visit March 20 to the U.S. Space & Rocket Center. The group attended an Educator Resource Center workshop for Women's History Month.

Reorganization

Continued from page 1

Office and the Missions Operations Lab. We had to decide whether to move these groups to the Flight Projects Directorate. One group within the Structures and Dynamics Lab was directing about 85 percent of its efforts toward the Environmental Control and Life Support System for the Space Station. Another group in the Systems Analysis and Integration Lab was directing all of its efforts to the Environmental Control and Life Support System. The decision to move these two groups to the new directorate means that work on the Environmental Control and Life Support System will be more focused. Now, the whole team is together," Roth said.

The top level of management for the new directorate will include the director, deputy director and chief engineer. The



Photo by Danny Reeves

Axel Roth reviews changes to the new Flight Projects Directorate.

organization will include a Business Management Office and Management Support Function.

The Advanced Projects Office within the directorate will support any advanced projects that do not fall in the Space Transportation Directorate or in the Science Directorate.

The directorate will include a Flight Systems Department, Payload Operations and Integration Department and Ground Systems Department.

"The Flight Systems Department is made up basically of hardware elements that we are responsible for providing to the Space Station," said Roth, referring to the Environmental Control and Life Support System, Space Station Nodes 2 and 3, and other elements.

Payload Operations and Integration will comprise the largest element within the directorate. This includes management, design, development, operations, integration, crew training and other functions related to Space Station payloads. "We are responsible at Marshall for the payload operations of the Space Station and for making sure it all happens correctly," said Roth. Ground Systems will include groups involved in mission systems development, support and operations.

Like the other reorganization teams, Roth's team also sought advice from the Customer and Employee Relations Directorate, Center Operations Directorate and the Office of Chief Financial Officer. "These people brought up some good points that we might have forgotten had we been left to our own devices," said Roth.

The writer works in the Internal Relations and Communications Office.



Photo by Doug Stoffer

Girls Inc. honors Center Deputy Director

Marshall Deputy Director Carolyn Griner, center, receives the "She Knows Where She's Going Award" from Girls Incorporated of Huntsville at a luncheon March 18 at the Huntsville Marriott Hotel. Also receiving awards, at left, Janet Martin of Calhoun Community College, and, at right, Huntsville Mayor Loretta Spencer. Girls Incorporated provides programs for educational enrichment, recreation and social development, and career and life skills to girls ages 5-19. The award is presented annually by the organization to women of achievement who, in their personal and professional lives, serve as excellent role models.

Logistics office seeks feedback

A new customer survey form developed by the Logistics Services Office is being used to gather feedback on all provided products and services.

The short survey form will be used to track customer satisfaction and make improvements to the many logistics processes in place at Marshall.

The forms will be given to Marshall personnel randomly upon receipt of a product or service. Customers are asked to fill out the pre-addressed form and place it in the Marshall mail system for delivery to the Logistics Services Office.

"For instance, if you take a ride in the taxi, the taxi driver might hand you a form, or you may receive one if you have furniture moved to your office," said Roy Malone, the director of the Logistics Services Office. "It's a way to make our products and services better."

Malone said he will personally review every survey form returned. For information about this program, call Malone at 544-0506.

Space Sciences Lab Website wins People's Voice Award

The International Academy of the Digital Arts and Sciences has recognized Marshall's Space Sciences Laboratory Website the winner of its People's Voice Award. Voters solicited from Internet users worldwide gave the "Best Science Site" honor to Science@NASA. The award was announced March 18 in San Francisco. The Marshall science Website can be found at: www.science.nasa.gov

Economy

Continued from page 1

The \$722 million spent in Alabama by the Center was more than its expenditures in any other state. Approximately \$220 million in additional NASA funding was spent in the Huntsville area for International Space Station hardware development by The Boeing Co.

The Center received \$2.3 billion in fiscal 1998 — approximately 17 percent of NASA's \$13.6 billion budget. Marshall spent \$1.26 billion for Human Space Flight activities, \$687 million for Science, Aeronautics and Technology and the balance — \$380 million — on mission support at the Center and other sites across the country.

Since it was established in 1960, Marshall has had budget responsibility for \$62.6 billion. When year-by-year figures are adjusted for inflation, this total is

equivalent to more than \$161 billion in 1998 dollars.

Marshall has paid \$4.6 billion in federal salaries in the last 38 years.

At the end of September 1998, Marshall had 2,759 civil service permanent and temporary employees, including employees at resident offices at prime contractors' facilities and at the Michoud Assembly Facility in New Orleans, La.

Of Marshall's total civil service workforce last year, 2,224 were college graduates. Of those graduates, 1,609 had bachelor's degrees. There were 147 employees with doctorate degrees and 468 with master's degrees in engineering, science (with mathematics and physics being heavily represented) and other disciplines — predominantly business administration.

During the last fiscal year, approxi-

mately 25,106 contractor personnel worked for Marshall, including 2,753 in mission support; 9,539 on prime contract work; and 12,814 as subcontractors and vendors. Of the total, 6,404 worked in Alabama. An additional 1,606 contractors were associated with International Space Station work being done by Boeing in Huntsville, and other agency contracts.

In fiscal year 1998, more than 229,000 people toured Marshall, including educators; civic and conference visitors; and news media. Of those visitors, 170,000 saw Marshall as part of the U.S. Space & Rocket Center's bus tour program and 26,000 visited the Center during Marshall's Open House in May 1998.

The writer, a contractor employed by ASRI, supports the Media Relations Office.

Employee Ads

Miscellaneous

- ★ Lady's leather sandals w/2-1/2" heels, suede soles; gold, size 9, \$25; silver, size 7. 464-9910
- ★ Sofa by Pulman, predominately blue, 82" long, \$100 obo. 883-5543
- ★ Glass and brass end tables, \$25 each; coffee table, \$75; two rockers, \$25 each. 882-2607
- ★ Solid oak dining set, 48" round pedestal table and four chairs, \$400. 828-7803
- ★ Rescued, needs home, 1-year-old black female lab, shots, spayed; 3-month-old pups, lab mix, \$35 adoption fee. 423-7126
- ★ Tow hitch for Jeep Cherokee, complete assembly, \$80; Orion car stereo amp, HCCA225, \$30. 922-5727
- ★ Motorola MicroTac 650e cellular phone w/ car charger, \$25; pager w/leather case, \$15. 830-8401
- ★ Hoyer handi-cap lift, roll-a-round type, 165"; full size van bench seats, \$65 each. 852-6952
- ★ Bernina 1530 Inspiration sewing machine, computerized, 3 years old, many decorative stitch pattern groups. 723-4983
- ★ Computer, Pionex, 486SX33MAG, 250MB HD, 2XCD, 5-1/2" floppy, 3-3/4" floppy, 28klbs. Modem, 15" monitor, \$500. 883-9789
- ★ White wrought-iron 2- and 3-seat gliders, chaise lounge, 3 tables, \$475; twin bed and two headboards, \$50. 883-4343
- ★ Girl's 3-speed bike, \$25; golf clubs, bag and cart, \$50; stereo, \$35. 536-8951

Vehicles

- ★ 1996 Mercury Sable GS wagon, third seat, 58K miles, \$11,000, negotiable. 971-9490
- ★ 1989 Volvo 760 turbo, gray w/black leather, auto, power, 112K miles, \$6,500. 851-6661
- ★ 1991 Lumina van, seats 7, roof rack, A/C, cruise, PW, 84.5K miles, \$3,800 obo. 837-5581
- ★ 1986 Honda Accord, DX, 5-speed, 4-door sedan, blue, \$2,150. 895-9196
- ★ 1987 Mazda 626 LX, 4-door, 5-speed, 135K miles, tilt, cruise, air, all power, \$2,400. 721-9601

- ★ 1991 Toyota Camry DX, 117K miles, white, 4-door, automatic, power package, cruise, \$3,000. 773-5791
- ★ 1975 Chevy K-5 Blazer, 4 wheel drive, buckshot mudders, 100K+ miles, \$1,500. 353-4455
- ★ 1985 Ford Ranger XL, needs mechanical work, \$550. 837-3192
- ★ 1997 Chevy S-10 LS, step-side, air, AM FM/cassette, 5-speed, 4-cylinder, 34K miles, 28MPG, 1 owner, \$10,900. 534-6071

Wanted

- ★ Folding twin stroller, side-by-side (recent model) w/storage basket. 722-9407
- ★ To buy aluminum baseball bats.
- ★ Olympic plate weights. 355-2161

Found

- ★ Nedelhorne charm for bracelet. 544-0077 to identify.

Center Announcements

✦ **Asian/Pacific Month** — The Asian Pacific American Heritage Month Advisory Committee will meet Thursday at 11:30 a.m. in Bldg. 4200, conference room 329, to discuss plans for the Asian/Pacific American Heritage Month celebration in May. All civil service employees and on-site contractors are welcome to help in the celebration. For more information, please call Dr. Lynn Chou at 544-1591.

✦ **Florida Tech Information Session** — Florida Institute of Technology is offering a master of science degree in Computer Information Systems. Classes start in May. For more information on this program, attend an information session being held Thursday, from 11:30 a.m.-1 p.m. in Bldg. 5304, room 4326 at the Sparkman Center. Call 881-7878 to reserve a seat.

✦ **Tennis Tournament** — The MARS Tennis Club is having its first tournament of the season, the April Fool's Open Doubles Tournament on April 1. Play starts at 5:30 p.m. Please call Ronda Moyers at 544-6809 if you plan to play. The fee for non-club members is \$3.

✦ **Emergency service for GSA vehicles** —

The motor pool will come out and use jumper cables or change a flat tire on all GSA vehicles assigned to your organization or area. The user will then be responsible for taking the vehicle on to GSA for followup repairs. For more information, call 544-1776.

✦ **Spot an Environmentalist** — "Spot an Environmentalist" is an activity to encourage Marshall employees and on-site contractors to do their part in keeping the Center environmentally friendly. If you observe an employee helping to keep Marshall environmentally friendly, please submit the nominee's name with a short justification of the environmental deed via e-mail to lucy.boger@msfc.nasa.gov or mail to AB11, Bldg. 4250, room 16B, no later than April 8. Ten nominees will be awarded a gift certificate from the "Wild Birds Unlimited." Nominees will receive their awards at the tree planting ceremony April 23 at 10 a.m., outside Bldg. 4650.

✦ **Faster Dial-in Access** — Beginning March 24, RAS dial-in users who connect using 961-3337 or 1-888-825-5337 will no longer use these numbers. Please change these phone numbers in the control panel dial-up networking properties to 895-0722 and 1-888-493-9160. You will continue to use your DDS userid and password for remote access authentication. This action will migrate you to a faster ISDN or 56kbps V.90 modem dial-in system. For more information, call the NASA Information Support Center at 544-HELP, Option 0.

✦ **Y2K Compliance** — The Microsoft Office 97 SR-2a Y2K compliance upgrade is available to all Windows 95 and NT DDS users for voluntary installation. It is located in the DDS folder under the Setup folder. The icon is named "Office 97 SR-2a." For more information, call 544-HELP, Option 0.

Job Opportunity

CPP 99-22-JB, Management Support Assistant (OA), GS-303-7, Customer and Employee Relations Directorate. Closes April 1.

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